

E Neil G Marsh

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

157 papers	5,422 citations	45 h-index	64 g-index
221 ext. papers	6,022 ext. citations	6.4 avg, IF	6.02 L-index

#	Paper	IF	Citations
157	Using kinetic isotope effects to probe the mechanism of adenosylcobalamin-dependent enzymes. <i>Methods in Enzymology</i> , 2022 ,	1.7	0
156	Probing protein aggregation at buried interfaces: distinguishing between adsorbed protein monomers, dimers, and a monomer-dimer mixture .. <i>Chemical Science</i> , 2022 , 13, 975-984	9.4	7
155	Viperin-taken down with a pinch of salt. <i>EMBO Reports</i> , 2021 , e54258	6.5	
154	New Orange Ligand-Dependent Fluorescent Reporter for Anaerobic Imaging. <i>ACS Chemical Biology</i> , 2021 , 16, 2109-2115	4.9	2
153	The Antiviral Enzyme, Viperin, Activates Protein Ubiquitination by the E3 Ubiquitin Ligase, TRAF6. <i>Journal of the American Chemical Society</i> , 2021 , 143, 4910-4914	16.4	4
152	Molecular Structure of the Surface-Immobilized Super Uranyl Binding Protein. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 7706-7716	3.4	10
151	The antiviral enzyme viperin inhibits cholesterol biosynthesis. <i>Journal of Biological Chemistry</i> , 2021 , 297, 100824	5.4	1
150	Kinetic Analysis of Transient Intermediates in the Mechanism of Prenyl-Flavin-Dependent Ferulic Acid Decarboxylase. <i>Biochemistry</i> , 2021 , 60, 125-134	3.2	2
149	Viperin binds STING and enhances the type-I interferon response following dsDNA detection. <i>Immunology and Cell Biology</i> , 2021 , 99, 373-391	5	7
148	Giving superabsorbent polymers a second life as pressure-sensitive adhesives. <i>Nature Communications</i> , 2021 , 12, 4524	17.4	11
147	Decarboxylation of Aromatic Carboxylic Acids by the Prenylated-FMN-dependent Enzyme Phenazine-1-carboxylic Acid Decarboxylase. <i>ACS Catalysis</i> , 2021 , 11, 11723-11732	13.1	0
146	Heme oxygenase-2 is post-translationally regulated by heme occupancy in the catalytic site. <i>Journal of Biological Chemistry</i> , 2020 , 295, 17227-17240	5.4	15
145	Imaging living obligate anaerobic bacteria with bilin-binding fluorescent proteins. <i>Current Research in Microbial Sciences</i> , 2020 , 1, 1-6	3.3	8
144	Viperin: An ancient radical SAM enzyme finds its place in modern cellular metabolism and innate immunity. <i>Journal of Biological Chemistry</i> , 2020 , 295, 11513-11528	5.4	22
143	Targeting viperin to the mitochondrion inhibits the thiolase activity of the trifunctional enzyme complex. <i>Journal of Biological Chemistry</i> , 2020 , 295, 2839-2849	5.4	10
142	Interactions between Viperin, Vesicle-Associated Membrane Protein A, and Hepatitis C Virus Protein NS5A Modulate Viperin Activity and NS5A Degradation. <i>Biochemistry</i> , 2020 , 59, 780-789	3.2	7
141	The Photoactive Excited State of the B-Based Photoreceptor CarH. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 10732-10738	3.4	11

140	Probing Metal Ion Discrimination in a Protein Designed to Bind Uranyl Cation With Femtomolar Affinity. <i>Frontiers in Molecular Biosciences</i> , 2019 , 6, 73	5.6	2
139	Molecular Mechanisms of Interactions between Monolayered Transition Metal Dichalcogenides and Biological Molecules. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9980-9988	16.4	18
138	Coiled-Coil-Mediated Assembly of an Icosahedral Protein Cage with Extremely High Thermal and Chemical Stability. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9207-9216	16.4	34
137	Viperin interacts with the kinase IRAK1 and the E3 ubiquitin ligase TRAF6, coupling innate immune signaling to antiviral ribonucleotide synthesis. <i>Journal of Biological Chemistry</i> , 2019 , 294, 6888-6898	5.4	23
136	Extending fluorescence microscopy into anaerobic environments. <i>Current Opinion in Chemical Biology</i> , 2019 , 51, 98-104	9.7	22
135	Metal-dependent assembly of a protein nano-cage. <i>Protein Science</i> , 2019 , 28, 1620-1629	6.3	12
134	Simultaneous Observation of the Orientation and Activity of Surface-Immobilized Enzymes. <i>Langmuir</i> , 2018 , 34, 9133-9140	4	17
133	Elaborating a coiled-coil-assembled octahedral protein cage with additional protein domains. <i>Protein Science</i> , 2018 , 27, 1893-1900	6.3	9
132	A Novel Radical SAM mechanism mediated by the Interferon-Inducible Protein Viperin. <i>FASEB Journal</i> , 2018 , 32, 796.7	0.9	
131	Viperin: A Radical SAM-dependent Approach in the Regulation of Farnesylpyrophosphate Synthase. <i>FASEB Journal</i> , 2018 , 32, 526.11	0.9	
130	Kinetic Characterization of Prenyl-Flavin Synthase from <i>Saccharomyces cerevisiae</i> . <i>Biochemistry</i> , 2018 , 57, 696-700	3.2	11
129	Effect of immobilization site on the orientation and activity of surface-tethered enzymes. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 1021-1029	3.6	29
128	Investigating the Effect of Two-Point Surface Attachment on Enzyme Stability and Activity. <i>Journal of the American Chemical Society</i> , 2018 , 140, 16560-16569	16.4	33
127	Folate binding protein: therapeutic natural nanotechnology for folic acid, methotrexate, and leucovorin. <i>Nanoscale</i> , 2017 , 9, 2603-2615	7.7	12
126	Engineered Surface-Immobilized Enzyme that Retains High Levels of Catalytic Activity in Air. <i>Journal of the American Chemical Society</i> , 2017 , 139, 2872-2875	16.4	27
125	Evaluation of de novo-designed coiled coils as off-the-shelf components for protein assembly. <i>Molecular Systems Design and Engineering</i> , 2017 , 2, 140-148	4.6	16
124	Symmetry-Directed Design of Protein Cages and Protein Lattices and Their Applications. <i>Sub-Cellular Biochemistry</i> , 2017 , 83, 195-224	5.5	6
123	Immobilized enzymes: understanding enzyme - surface interactions at the molecular level. <i>Organic and Biomolecular Chemistry</i> , 2017 , 15, 9539-9551	3.9	98

122	Conjugation Dependent Interaction of Folic Acid with Folate Binding Protein. <i>Bioconjugate Chemistry</i> , 2017 , 28, 2350-2360	6.3	10
121	Evidence for a 1,3-Dipolar Cyclo-addition Mechanism in the Decarboxylation of Phenylacrylic Acids Catalyzed by Ferulic Acid Decarboxylase. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10972-10975	16.4	28
120	Symmetry-Directed Self-Assembly of a Tetrahedral Protein Cage Mediated by de Novo-Designed Coiled Coils. <i>ChemBioChem</i> , 2017 , 18, 1888-1892	3.8	35
119	Effect of Surface Crowding and Surface Hydrophilicity on the Activity, Stability and Molecular Orientation of a Covalently Tethered Enzyme. <i>Langmuir</i> , 2017 , 33, 7152-7159	4	22
118	Flexible, symmetry-directed approach to assembling protein cages. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 8681-6	11.5	77
117	Does Viperin Function as a Radical S-Adenosyl-L-methionine-dependent Enzyme in Regulating Farnesylpyrophosphate Synthase Expression and Activity?. <i>Journal of Biological Chemistry</i> , 2016 , 291, 26806-26815	5.4	25
116	Substrate-Triggered Exosite Binding: Synergistic Dendrimer/Folic Acid Action for Achieving Specific, Tight-Binding to Folate Binding Protein. <i>Biomacromolecules</i> , 2016 , 17, 922-7	6.9	12
115	Immobilization of enzyme on a polymer surface. <i>Surface Science</i> , 2016 , 648, 53-59	1.8	13
114	A Label-free Sirtuin 1 Assay based on Droplet-Electrospray Ionization Mass Spectrometry. <i>Analytical Methods</i> , 2016 , 8, 3458-3465	3.2	17
113	An Unusual Iron-Dependent Oxidative Deformylation Reaction Providing Insight into Hydrocarbon Biosynthesis in Nature. <i>ACS Catalysis</i> , 2016 , 6, 3293-3300	13.1	12
112	Mechanism of the Novel Prenylated Flavin-Containing Enzyme Ferulic Acid Decarboxylase Probed by Isotope Effects and Linear Free-Energy Relationships. <i>Biochemistry</i> , 2016 , 55, 2857-63	3.2	33
111	High-resolution NMR characterization of low abundance oligomers of amyloid- β without purification. <i>Scientific Reports</i> , 2015 , 5, 11811	4.9	82
110	Recent progress in hydrocarbon biofuel synthesis: Pathways and enzymes. <i>Chinese Chemical Letters</i> , 2015 , 26, 431-434	8.1	7
109	Effects of Peptide Immobilization Sites on the Structure and Activity of Surface-Tethered Antimicrobial Peptides. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 7146-7155	3.8	48
108	Substrate-bound structures of benzylsuccinate synthase reveal how toluene is activated in anaerobic hydrocarbon degradation. <i>Journal of Biological Chemistry</i> , 2015 , 290, 22398-408	5.4	27
107	Molecular-Level Insights into Orientation-Dependent Changes in the Thermal Stability of Enzymes Covalently Immobilized on Surfaces. <i>Langmuir</i> , 2015 , 31, 6145-53	4	34
106	Folate binding protein Outlook for drug delivery applications. <i>Chinese Chemical Letters</i> , 2015 , 26, 426-430	8.1	11
105	Isofunctional enzymes PAD1 and UbiX catalyze formation of a novel cofactor required by ferulic acid decarboxylase and 4-hydroxy-3-polyprenylbenzoic acid decarboxylase. <i>ACS Chemical Biology</i> , 2015 , 10, 1137-44	4.9	65

104	Characterization of a highly flexible self-assembling protein system designed to form nanocages. <i>Protein Science</i> , 2014 , 23, 190-9	6.3	25
103	Insights into substrate and metal binding from the crystal structure of cyanobacterial aldehyde deformylating oxygenase with substrate bound. <i>ACS Chemical Biology</i> , 2014 , 9, 2584-93	4.9	27
102	Comparison of the influence of humidity and D-mannitol on the organization of tetraethylene glycol-terminated self-assembled monolayers and immobilized antimicrobial peptides. <i>Langmuir</i> , 2014 , 30, 7143-51	4	5
101	Role of active site residues in promoting cobalt-carbon bond homolysis in adenosylcobalamin-dependent mutases revealed through experiment and computation. <i>Biochemistry</i> , 2014 , 53, 169-77	3.2	16
100	Structures of benzylsuccinate synthase elucidate roles of accessory subunits in glycyl radical enzyme activation and activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 10161-6	11.5	44
99	Recent advances in radical SAM enzymology: new structures and mechanisms. <i>ACS Chemical Biology</i> , 2014 , 9, 1929-38	4.9	51
98	Mechanistic insights from reaction of hexiranyl-aldehydes with cyanobacterial aldehyde deformylating oxygenase. <i>ACS Chemical Biology</i> , 2014 , 9, 570-7	4.9	23
97	Surface orientation control of site-specifically immobilized nitro-reductase (NfsB). <i>Langmuir</i> , 2014 , 30, 5930-8	4	25
96	Solvent isotope effects on alkane formation by cyanobacterial aldehyde deformylating oxygenase and their mechanistic implications. <i>Biochemistry</i> , 2014 , 53, 5537-43	3.2	24
95	Fluorinated proteins: from design and synthesis to structure and stability. <i>Accounts of Chemical Research</i> , 2014 , 47, 2878-86	24.3	117
94	Using (19)F NMR to probe biological interactions of proteins and peptides. <i>ACS Chemical Biology</i> , 2014 , 9, 1242-50	4.9	125
93	Design, synthesis, and study of fluorinated proteins. <i>Methods in Molecular Biology</i> , 2014 , 1216, 89-116	1.4	5
92	Molecular orientation of enzymes attached to surfaces through defined chemical linkages at the solid-liquid interface. <i>Journal of the American Chemical Society</i> , 2013 , 135, 12660-9	16.4	62
91	Aldehyde-forming fatty acyl-CoA reductase from cyanobacteria: expression, purification and characterization of the recombinant enzyme. <i>FEBS Journal</i> , 2013 , 280, 4773-81	5.7	32
90	Resolution of oligomeric species during the aggregation of A β -40 using (19)F NMR. <i>Biochemistry</i> , 2013 , 52, 1903-12	3.2	85
89	Perfluoro-tert-butyl-homoserine as a sensitive 19F NMR reporter for peptide-membrane interactions in solution. <i>Journal of Peptide Science</i> , 2013 , 19, 308-14	2.1	22
88	Probing the mechanism of cyanobacterial aldehyde decarbonylase using a cyclopropyl aldehyde. <i>Journal of the American Chemical Society</i> , 2013 , 135, 5234-7	16.4	55
87	Production of propane and other short-chain alkanes by structure-based engineering of ligand specificity in aldehyde-deformylating oxygenase. <i>ChemBioChem</i> , 2013 , 14, 1204-8	3.8	74

86	Aldehyde Decarbonylases: Enigmatic Enzymes of Hydrocarbon Biosynthesis. <i>ACS Catalysis</i> , 2013 , 3,	13.1	45
85	Comparison of the structures and stabilities of coiled-coil proteins containing hexafluoroleucine and t-butylalanine provides insight into the stabilizing effects of highly fluorinated amino acid side-chains. <i>Protein Science</i> , 2012 , 21, 1705-15	6.3	11
84	Influence of fluorination on the thermodynamics of protein folding. <i>Journal of the American Chemical Society</i> , 2012 , 134, 13027-34	16.4	34
83	Alternative pathways of human islet amyloid polypeptide aggregation distinguished by (19)f nuclear magnetic resonance-detected kinetics of monomer consumption. <i>Biochemistry</i> , 2012 , 51, 8154-62	3.2	106
82	Adenosylcobalamin enzymes: theory and experiment begin to converge. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2012 , 1824, 1154-64	4	41
81	Fluorine: a new element in protein design. <i>Protein Science</i> , 2012 , 21, 453-62	6.3	69
80	Structural basis for the enhanced stability of highly fluorinated proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 4810-5	11.5	69
79	Oxygen-Independent Decarbonylation of Aldehydes by Cyanobacterial Aldehyde Decarbonylase: A New Reaction of Diiron Enzymes. <i>Angewandte Chemie</i> , 2011 , 123, 7286-7290	3.6	8
78	Oxygen-independent decarbonylation of aldehydes by cyanobacterial aldehyde decarbonylase: a new reaction of diiron enzymes. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 7148-52	16.4	89
77	Evaluation of a symmetry-based strategy for assembling protein complexes. <i>RSC Advances</i> , 2011 , 1, 10045-1012	3.1	31
76	Using fluorine nuclear magnetic resonance to probe changes in the structure and dynamics of membrane-active peptides interacting with lipid bilayers. <i>Biochemistry</i> , 2011 , 50, 5979-87	3.2	25
75	Oxygen-independent alkane formation by non-heme iron-dependent cyanobacterial aldehyde decarbonylase: investigation of kinetics and requirement for an external electron donor. <i>Biochemistry</i> , 2011 , 50, 10743-50	3.2	61
74	Using fluorine nuclear magnetic resonance to probe the interaction of membrane-active peptides with the lipid bilayer. <i>Biochemistry</i> , 2010 , 49, 5760-5	3.2	49
73	Hydrogen tunneling in adenosylcobalamin-dependent glutamate mutase: evidence from intrinsic kinetic isotope effects measured by intramolecular competition. <i>Biochemistry</i> , 2010 , 49, 3168-73	3.2	16
72	Conversion of (3S,4R)-tetrahydrodaidzein to (3S)-equol by THD reductase: proposed mechanism involving a radical intermediate. <i>Biochemistry</i> , 2010 , 49, 5582-7	3.2	29
71	Role of zinc in human islet amyloid polypeptide aggregation. <i>Journal of the American Chemical Society</i> , 2010 , 132, 8973-83	16.4	181
70	Adenosyl radical: reagent and catalyst in enzyme reactions. <i>ChemBioChem</i> , 2010 , 11, 604-21	3.8	77
69	Fluorine--a new element in the design of membrane-active peptides. <i>Molecular BioSystems</i> , 2009 , 5, 1143-7		54

68	Engineering protein stability and specificity using fluorous amino acids: the importance of packing effects. <i>Biochemistry</i> , 2009 , 48, 10810-7	3.2	41
67	Subunit structure of benzylsuccinate synthase. <i>Biochemistry</i> , 2009 , 48, 1284-92	3.2	29
66	Insights into the mechanisms of adenosylcobalamin (coenzyme B12)-dependent enzymes from rapid chemical quench experiments. <i>Biochemical Society Transactions</i> , 2009 , 37, 336-42	5.1	9
65	Covalent MetalPeptide Framework Compounds That Extend in One and Two Dimensions. <i>Crystal Growth and Design</i> , 2008 , 8, 296-303	3.5	45
64	Using fluorous amino acids to probe the effects of changing hydrophobicity on the physical and biological properties of the beta-hairpin antimicrobial peptide protegrin-1. <i>Biochemistry</i> , 2008 , 47, 9243-50	3.2	72
63	The fluorous effect in proteins: properties of alpha4F6, a 4-alpha-helix bundle protein with a fluorocarbon core. <i>Biochemistry</i> , 2008 , 47, 4484-90	3.2	43
62	Using fluorous amino acids to modulate the biological activity of an antimicrobial peptide. <i>ChemBioChem</i> , 2008 , 9, 370-3	3.8	98
61	Toward an improved understanding of the glutamate mutase system. <i>Journal of the American Chemical Society</i> , 2007 , 129, 1623-33	16.4	19
60	Evidence for coupled motion and hydrogen tunneling of the reaction catalyzed by glutamate mutase. <i>Biochemistry</i> , 2007 , 46, 883-9	3.2	22
59	Glutamate Mutase 2007 , 253-271		1
58	Intrinsic deuterium kinetic isotope effects in glutamate mutase measured by an intramolecular competition experiment. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 8455-9	16.4	14
57	Synthesis of Mono- and Di-Deuterated (2S, 3S)-3-Methylaspartic Acids to Facilitate Measurement of Intrinsic Kinetic Isotope Effects in Enzymes. <i>Tetrahedron</i> , 2007 , 63, 4663-4668	2.4	8
56	Changes in the free energy profile of glutamate mutase imparted by the mutation of an active site arginine residue to lysine. <i>Archives of Biochemistry and Biophysics</i> , 2007 , 461, 194-9	4.1	4
55	Using nonnatural amino acids to control metal-coordination number in three-stranded coiled coils. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 2864-8	16.4	61
54	Using Nonnatural Amino Acids to Control Metal-Coordination Number in Three-Stranded Coiled Coils. <i>Angewandte Chemie</i> , 2006 , 118, 2930-2934	3.6	19
53	Reaction of adenosylcobalamin-dependent glutamate mutase with 2-thiolglutarate. <i>Biochemistry</i> , 2006 , 45, 11650-7	3.2	9
52	Mechanism of benzylsuccinate synthase probed by substrate and isotope exchange. <i>Journal of the American Chemical Society</i> , 2006 , 128, 16056-7	16.4	31
51	Deuterium isotope effects in the unusual addition of toluene to fumarate catalyzed by benzylsuccinate synthase. <i>Biochemistry</i> , 2006 , 45, 13932-8	3.2	25

50	Modulating protein structure with fluorous amino acids: increased stability and native-like structure conferred on a 4-helix bundle protein by hexafluoroleucine. <i>Journal of the American Chemical Society</i> , 2006 , 128, 337-43	16.4	93
49	Isotope effects for deuterium transfer between substrate and coenzyme in adenosylcobalamin-dependent glutamate mutase. <i>Biochemistry</i> , 2005 , 44, 2686-91	3.2	23
48	Mechanism of benzylsuccinate synthase: stereochemistry of toluene addition to fumarate and maleate. <i>Journal of the American Chemical Society</i> , 2005 , 127, 8608-9	16.4	39
47	Electronic structure studies of the adenosylcobalamin cofactor in glutamate mutase. <i>Biochemistry</i> , 2005 , 44, 15167-81	3.2	20
46	Time-resolved measurements of the photolysis and recombination of adenosylcobalamin bound to glutamate mutase. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 18146-52	3.4	57
45	Cation- π interactions studied in a model coiled-coil peptide. <i>Protein Science</i> , 2004 , 13, 2244-51	6.3	35
44	S-adenosylmethionine radical enzymes. <i>Bioorganic Chemistry</i> , 2004 , 32, 326-40	5.1	51
43	Photolysis and recombination of adenosylcobalamin bound to glutamate mutase. <i>Journal of the American Chemical Society</i> , 2004 , 126, 1598-9	16.4	49
42	Fluorous effect in proteins: de novo design and characterization of a four- α -helix bundle protein containing hexafluoroleucine. <i>Biochemistry</i> , 2004 , 43, 16277-84	3.2	88
41	Pre-steady-state measurement of intrinsic secondary tritium isotope effects associated with the homolysis of adenosylcobalamin and the formation of 5Udeoxyadenosine in glutamate mutase. <i>Biochemistry</i> , 2004 , 43, 2155-8	3.2	22
40	Control of metal coordination number in de novo designed peptides through subtle sequence modifications. <i>Journal of the American Chemical Society</i> , 2004 , 126, 9178-9	16.4	51
39	Role of Arg100 in the active site of adenosylcobalamin-dependent glutamate mutase. <i>Biochemistry</i> , 2004 , 43, 3238-45	3.2	13
38	The structure of ActVA-Orf6, a novel type of monooxygenase involved in actinorhodin biosynthesis. <i>EMBO Journal</i> , 2003 , 22, 205-15	13	135
37	Adenosylcobalamin-dependent glutamate mutase: pre-steady-state kinetic methods for investigating reaction mechanism. <i>Methods in Enzymology</i> , 2002 , 354, 380-99	1.7	5
36	Noncovalent self-assembly of a heterotetrameric diiron protein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 5150-4	11.5	58
35	Pre-steady-state kinetic studies on the Glu171Gln active site mutant of adenosylcobalamin-dependent glutamate mutase. <i>Biochemistry</i> , 2002 , 41, 15803-9	3.2	11
34	A novel reaction between adenosylcobalamin and 2-methyleneglutarate catalyzed by glutamate mutase. <i>Biochemistry</i> , 2002 , 41, 3200-6	3.2	28
33	A short and efficient synthesis of L-5,5,5U5U5Uhexafluoroleucine from N-Cbz-L-serine. <i>Organic Letters</i> , 2002 , 4, 4281-3	6.2	34

32	Protein-coenzyme interactions in adenosylcobalamin-dependent glutamate mutase. <i>Biochemical Journal</i> , 2001 , 355, 131-7	3.8	18
31	Protein-coenzyme interactions in adenosylcobalamin-dependent glutamate mutase. <i>Biochemical Journal</i> , 2001 , 355, 131-137	3.8	36
30	Adenosylcobalamin-dependent isomerases: new insights into structure and mechanism. <i>Current Opinion in Chemical Biology</i> , 2001 , 5, 499-505	9.7	90
29	The role of the active site glutamate in the rearrangement of glutamate to 3-methylaspartate catalyzed by adenosylcobalamin-dependent glutamate mutase. <i>Chemistry and Biology</i> , 2001 , 8, 1143-9		18
28	A protein pre-organized to trap the nucleotide moiety of coenzyme B(12): refined solution structure of the B(12)-binding subunit of glutamate mutase from <i>Clostridium tetanomorphum</i> . <i>ChemBioChem</i> , 2001 , 2, 643-55	3.8	9
27	The B(12)-binding subunit of glutamate mutase from <i>Clostridium tetanomorphum</i> traps the nucleotide moiety of coenzyme B(12). <i>Journal of Molecular Biology</i> , 2001 , 309, 777-91	6.5	28
26	Tritium partitioning and isotope effects in adenosylcobalamin-dependent glutamate mutase. <i>Biochemistry</i> , 2001 , 40, 13060-7	3.2	28
25	Review Article Coenzyme-B(12)-Dependent Glutamate Mutase. <i>Bioorganic Chemistry</i> , 2000 , 28, 176-189	5.1	41
24	Crystallization and preliminary X-ray diffraction studies of a monooxygenase from <i>Streptomyces coelicolor</i> A3(2) involved in the biosynthesis of the polyketide actinorhodin. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2000 , 56, 481-3		7
23	Adenosylcobalamin-dependent enzymes. <i>Sub-Cellular Biochemistry</i> , 2000 , 35, 351-403	5.5	3
22	Mechanism of Glutamate Mutase: Identification and Kinetic Competence of Acrylate and Glycyl Radical as Intermediates in the Rearrangement of Glutamate to Methylaspartate. <i>Journal of the American Chemical Society</i> , 2000 , 122, 10732-10733	16.4	45
21	Rearrangement of L-2-hydroxyglutarate to L-threo-3-methylmalate catalyzed by adenosylcobalamin-dependent glutamate mutase. <i>Biochemistry</i> , 2000 , 39, 10340-6	3.2	17
20	The reaction of the substrate analog 2-ketoglutarate with adenosylcobalamin-dependent glutamate mutase. <i>Journal of Biological Chemistry</i> , 1999 , 274, 11619-22	5.4	18
19	Pre-steady-state kinetic investigation of intermediates in the reaction catalyzed by adenosylcobalamin-dependent glutamate mutase. <i>Biochemistry</i> , 1999 , 38, 13684-91	3.2	40
18	How a protein prepares for B12 binding: structure and dynamics of the B12-binding subunit of glutamate mutase from <i>Clostridium tetanomorphum</i> . <i>Structure</i> , 1998 , 6, 1021-33	5.2	63
17	Coupling of cobalt-carbon bond homolysis and hydrogen atom abstraction in adenosylcobalamin-dependent glutamate mutase. <i>Biochemistry</i> , 1998 , 37, 11864-72	3.2	125
16	How enzymes control the reactivity of adenosylcobalamin: effect on coenzyme binding and catalysis of mutations in the conserved histidine-aspartate pair of glutamate mutase. <i>Biochemistry</i> , 1997 , 36, 7884-9	3.2	46
15	Adenosylcobalamin-dependent glutamate mutase: examination of substrate and coenzyme binding in an engineered fusion protein possessing simplified subunit structure and kinetic properties. <i>Biochemistry</i> , 1997 , 36, 14939-45	3.2	47

14	Adenosylcobalamin-dependent glutamate mutase: properties of a fusion protein in which the cobalamin-binding subunit is linked to the catalytic subunit. <i>Biochemical Journal</i> , 1996 , 320 (Pt 3), 825-30	3.8	5
13	Carboxymethylation of MutS-cysteine-15 specifically inactivates adenosylcobalamin-dependent glutamate mutase. Examination of the role of this residue in coenzyme-binding and catalysis. <i>Journal of Biological Chemistry</i> , 1996 , 271, 29121-5	5.4	1
12	Identification of a flavin:NADH oxidoreductase involved in the biosynthesis of actinorhodin. Purification and characterization of the recombinant enzyme. <i>Journal of Biological Chemistry</i> , 1995 , 270, 17339-43	5.4	63
11	Tritium isotope effects in adenosylcobalamin-dependent glutamate mutase: implications for the mechanism. <i>Biochemistry</i> , 1995 , 34, 7542-7	3.2	37
10	A radical approach to enzyme catalysis. <i>BioEssays</i> , 1995 , 17, 431-41	4.1	49
9	Cloning and sequencing of glutamate mutase component E from <i>Clostridium tetanomorphum</i> . Organization of the mut genes. <i>FEBS Letters</i> , 1993 , 317, 44-8	3.8	18
8	Two isozymes of clavamate synthase central to clavulanic acid formation: cloning and sequencing of both genes from <i>Streptomyces clavuligerus</i> . <i>Biochemistry</i> , 1992 , 31, 12648-57	3.2	82
7	Cloning and sequencing of glutamate mutase component S from <i>Clostridium tetanomorphum</i> . Homologies with other cobalamin-dependent enzymes. <i>FEBS Letters</i> , 1992 , 310, 167-70	3.8	102
6	Purification and characterization of clavamate synthase from <i>Streptomyces clavuligerus</i> : an unusual oxidative enzyme in natural product biosynthesis. <i>Biochemistry</i> , 1990 , 29, 6499-508	3.2	119
5	Crystallization and preliminary diffraction data for adenosylcobalamin-dependent methylmalonyl-CoA mutase from <i>Propionibacterium shermanii</i> . <i>Journal of Molecular Biology</i> , 1988 , 200, 421-2	6.5	18
4	Interactions between Viperin, IRAK1 and TRAF6 couple innate immune signaling to antiviral ribonucleotide synthesis		1
3	Coiled Coil-Mediated Assembly of an Icosahedral Protein Cage with Extremely High Thermal and Chemical Stability		1
2	Viperin binds STING and enhances the type-I interferon response following dsDNA detection		6
1	Viperin inhibits cholesterol biosynthesis and interacts with enzymes in the cholesterol biosynthetic pathway		2